



Title: VIA Ultramobile Platform

Date: 2007/6/6

Ultra
Mobility

Agenda

- The Vision of “Mobility 2.0”
- VIA’s Ultramobility Solution 2007/2008
- Demonstration of the World’s Lowest Power x86
- Building the “Mobility 2.0” Infrastructure

The Vision of Mobility 2.0 Devices

Handheld



- Full Internet Experience
- PC Apps Compatibility
- Larger screen, 1024x600
- Multimedia functionality
- More connectivity



Notebook PC



- 8 hours battery life
- Lighter than Sub-notes
- Rich Connectivity Options
- Competitive pricing

Specific Application

Multifunction

Pioneering Partners as of VTF 2006 ...

Smart
Caddie



...fun to use, so much so it's addictive, easy to grab and go, small Size and light weight are an advantage that allows you to take it anywhere without being weighed down..... Bottom line is that we loved it.

TabletPc2.com

The Place for Tablet PC Comparisons, News, Reviews and Information



PaceBlade
technology



“We were also amazed by the versatility of the UMPC. Having the full Windows Tablet PC operating system combined with pen, touch and handheld controls in a single piece of equipment makes UMPC a very versatile piece of equipment. We found ourselves using it in places we don't normally take a Tablet PC with us. “

“UMPC Reviews”

<http://umpcreviews.info/>
VIA Technology Forum

“...Although hardware designs will vary by manufacturer, UMPCs will all feature small, lightweight designs that are optimized for mobility and ease of input.UMPC devices will have a battery life of two and a half hours or more, and feature 30-60 GB hard drive for storage, with VIA C7-M processors...”

“Q&A: Microsoft Unveils Details for Ultra-Mobile Personal Computers”

... 18 New Products in Market and More to Come ...

- OQO model 02
- Medion UMPC
- Gigabyte U60
- Aigo 爱国者移动公务王P8191
- Samsung Q1b
- PBJ Smart Caddie
- Akori AK8E
- Akori AK7
- HanWang T700
- UREN V1
- Pioneer DreamBook 700
- Pioneer DreamBook Vista UMPC 770
- Pioneer DreamBook 650
- TabletKiosk eo UMPC v7110
- TabletKiosk eo TurTab v7112XT
- PaceBlade Easybook P7
- Paceblade Easybook P8N
- Tronic PMG Quadpad Pro

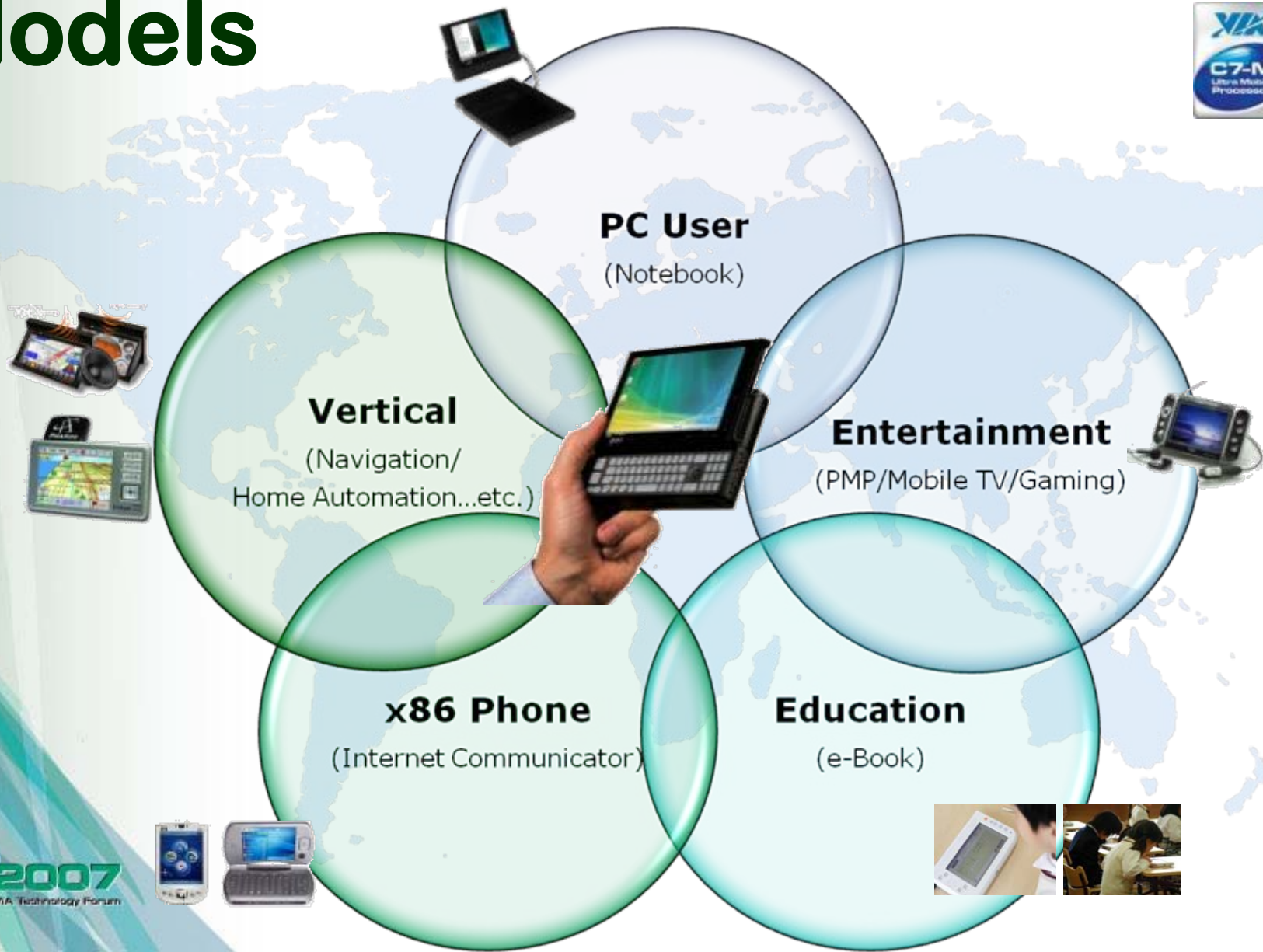


... With Enriched Variety!



SAMSUNG Q1b

Mobility 2.0 Device Usage Models



The “Road Warrior” PC User



Requirements

- Windows Vista User Experience (1024x600)
- >5 Hours Battery Life
- >1kg with full/QWERTY keyboard
- Full Multimedia Capability
- Connectivity
- Data Security

VIA Solution

- Processor up to 1.6GHz/800MHz FSB
- Decode Acceleration for Video (MPEG2/4, WMV9, H.264, VC-1)
- Low Power I/O Interface for Connectivity

Partner Solutions

- VIA Padlock SDK, Strongbox
- Finger print HW/SW
- 3G/3.5G Solution
- CMOS/CCD Module
- 7" / 6.5" Panel

The Entertainment User



Requirements

- Fanless Design
- >5 Hours Battery Life
- >700g in weight
- Full Multimedia (Music/Video/TV/Games) Capability
- Full Internet Connectivity

VIA Solution

- >1.0 W Average Power
- Decode Acceleration for Video (MPEG2/4, WMV9, H.264, VC-1)
- Smallest Footprint Silicon (65% shrink from 2007 to 2008)

Partner Solutions

- 5" /4.3" Panel
- Finger print HW/SW
- 3G/3.5G Solution
- Digital TV (DVB-T/DVB-H)
- CMOS/CCD Module

The “Education UMD” User

Requirements

- Ruggedized Design
- >5 Hours Battery Life
- >1kg with attached/detachable keyboard
- Full Internet Connectivity
- Touch Panel

VIA Solution

- Processor speeds up to ULV1.6GHz
- Both SATA and NAND-Flash Interface
- Decode Acceleration for Video (MPEG2/4, WMV9, H.264, VC-1)

Partner Solutions

- Education Content and applications
- 7" Panel
- Touch Digitizer
- CMOS/CCD Module



The “x86 Phone” User



Requirements

- Full PC Experience, Internet Connectivity
- Fanless Design
- >5 Hours Battery Life
- >1kg with full/QWERTY keyboard
- WebCam and VoIP

VIA Solution

- >1.0 W Average Power
- Low Power I/O Interface for Connectivity (3G, 3.5G, WiMAX, BT, 802.11n, etc)
- Smallest Footprint Silicon (65% shrink from 2007 to 2008)

Partner Solutions

- 5" /4.3" Panel
- 3G/3.5G/WiMAX Solution
- CMOS/CCD Module

The “Vertical CE” user



Requirements

- Specific Application but General Internet Connectivity
- Full Multimedia (Music/Video/TV/Games) Capability
- Supports both Docking and portable usage models

VIA Solution

- > 1.0 W Average Power
- Low Power I/O Interface for Connectivity
- Smallest Footprint Silicon (65% shrink from 2007 to 2008)

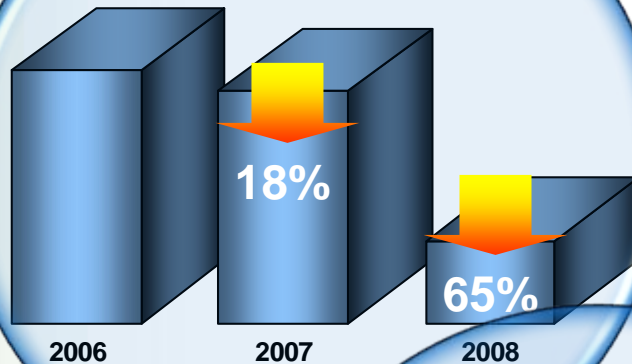
Partner Solutions

- 5" /4.3" Panel
- GPS Module/Software Solutions
- 3G/3.5G Solution
- CMOS/CCD Module

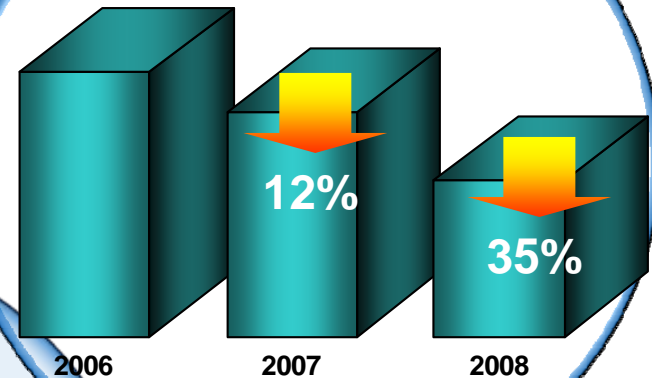
Continuing to Lead the Technology Wave ...

Size

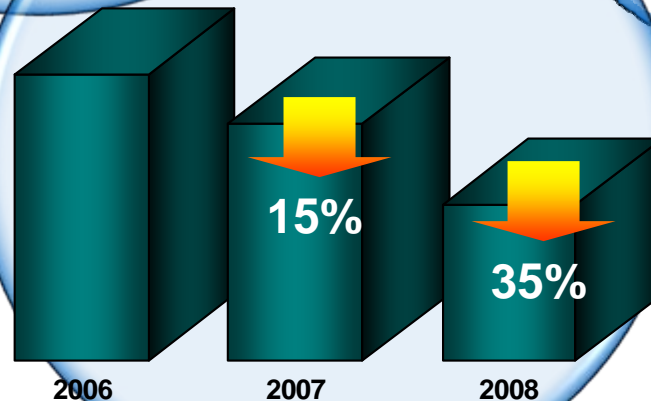
Silicon FootPrint



TDPmax Power Consumption
(Same Performance Level)



Average Power Consumption



Battery Life

... With No Compromise on Usability

1.0GHz CPU Speed

400MHz FSB

MPEG2, MPEG4,
WMV9

PCI, USB 2.0, etc.



2006

1.5GHz CPU Speed

400/800MHz FSB

MPEG2, MPEG4,
WMV9, H.264

PCI, USB 2.0, PCI-e,
UART, SPI, SDIO, etc.



2007

2X Performance of C7-M
at same TDP

400/800MHz FSB

MPEG2, MPEG4,
WMV9, H.264,
VC-1

Low Power
Interfaces with PC
compatibility



2008



- Demo -

CJ Hothaus

Director, CPU System Engineering

VIA Technologies, Inc.

Ultra
Mobility

Peripheral Suggestions for Low Power System Design

Feature	Interface							
	PCI-e	PCI	USB	SDIO	CF	SPI	PS/2	UART
WiFi	● ³	● ²	● ²	★ ¹				
BT			● ²					★ ¹
GPS			● ²					★ ¹
Mobile TV	● ³		● ²	★ ¹				
3G/3.5G	● ³	● ²	● ²			★ ¹		
Touch Panel			● ²				★ ¹	★ ¹
Touch Pad			● ²				★ ¹	★ ¹
WiMAX	● ³		● ²	★ ¹				

Note:

1. First choice of interface for low power consideration.
2. Second choice of interface for the feature.
3. Third choice of interface for the feature.

Hardware Solution Partners



Building the Mobility 2.0 Infrastructure

– Hardware Partners

- PC
- Connectivity

– Software Partners

- Microsoft
- Security
- Multimedia

– The Connectivity Framework

Thank You